CLAIMS

1. Method of recording scrambled digital data comprising the steps consisting in:

(a) receiving a scrambled digital data stream;

(b) identifying in said data stream a control packet containing at least one key for descrambling at least a part of the data of the stream;

(c) storing said control packet in a table; and

(d) recording the data stream and the table on a data storage medium.

2. Method according to Claim 1 in which the data stream received in step (a) comprises a plurality of control packets containing at least one descrambling key, wherein the storage step (c) is carried out only if the control packet identified in step (b) is not already stored in said table.

3. Method according to Claim 1, wherein at step (c), an index indicating the position of the control packet in the data stream is moreover stored in the table.

4. Method according to Claim 3, wherein the index comprises a serial number of the control packet with respect to the first packet of the data stream recorded.

5. Method according to Claim 3, wherein the index comprises a time stamp associated with said control packet which defines its position in the data stream with respect to clock reference values transmitted in the data stream.

6. Data storage medium, containing:

a scrambled digital data stream comprising control packets each containing at least one key for descrambling a part of the digital data, the control packets being multiplexed with the data packets, and

a table, stored separately from the data stream and containing at least one control packet.

7. Data storage medium according to Claim 6, wherein said table also contains, for each control packet, an index indicating the position of the control packet in the data stream.

8. Data storage medium according to Claim 7, wherein the index comprises a serial number of the control packet with respect to the first packet of the data stream recorded.

9. Data storage medium according to Claim 7, wherein the index comprises a time stamp associated with said control packet which defines its position in the data stream with respect to clock reference values transmitted in the data stream.

10. Method for reading scrambled digital data recorded on a medium according to one of Claims 6 to 9, comprising the steps consisting in:

(i) selecting a block of data from a stream of recorded data,

(j) extracting from the table recorded with the data at least one control packet corresponding to this block of data;

(k) extracting from the control packet a descrambling key; and

(l) using said descrambling key to descramble the block of data and to supply its content in clear for presentation to a user.

11. Method according to Claim 10, wherein step (k) of extracting a descrambling key from the control packet comprises a step of decrypting said control packet or said descrambling key.

12. Method according to Claim 10, for reading digital data recorded on a medium according to Claim 8, said method furthermore comprising a step consisting in selecting the serial numbers of the first packet and of the last packet that are contained in said data block selected in step (i), and

wherein in step (j) the control packet or packets lying between and including that one having the highest index less than the serial number of the first packet of the data block and that one having the highest index less than the serial number of the last packet of said data block is or are extracted from the table.

13. Method according to Claim 10, for reading digital data recorded on a medium according to Claim 9, said method furthermore comprising the steps consisting in:

- extracting from said data block at least one clock reference value,
- estimating, as a function of the clock reference value or values extracted, time stamps associated with the first packet and with the last packet that are contained in said data block selected in step (i), and
- extracting from the table, in step (j), the control packet or packets lying between and including that one having the highest index less than the time stamp associated with the first packet of the data block and that one having the highest index less than the time stamp associated with the last packet of said data block.